

CORRES. CONTROL  
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States Government

Department of Energy

Rocky Flats Field Office

# Memorandum

DUE  
DATE 11-1-94

ACTION Stiger

OCT 24 1994

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EGD:JAD:10557

Reduction in Groundwater Sampling and Analysis

S. Stiger, Associate General Manager  
Environmental Restoration Management  
EG&G Rocky Flats, Inc.

The Rocky Flats Field Office (RFFO) requests that EG&G reduce groundwater sampling and analysis per Environmental Protection Agency and Colorado Department of Public Health and Environment requested changes (Attachments) to the 1993 Well Evaluation Report (WER). These reductions are to include the wells recommended for semiannual sampling and analysis (Table 4-2 of the WER), the wells recommended for elimination from the sampling program (Table 4-4 of the WER) and the wells proposed for monthly water level monitoring (Table 4-1 of the WER).

The RFFO requests that these changes be made effective November 1, 1994 in order to reduce costs as soon as possible. If you have any questions concerning these reductions, please contact me at extension 4504, or Jon Dion, of my staff, at extension 5904.

*David A. Brockman*  
David A. Brockman  
Acting Assistant Manager for  
Environment, Safety and Health

2 Attachments

cc w/Atts:  
S. Singer, EG&G

cc w/o Atts:  
N. Castaneda, ER, RFFO  
J. Dion, EGD, RFFO  
L. Gregory-Frost, EG&G

CORRES. CONTROL X X  
ADMN RECORD/080 X 2  
PATST/130G X

Reviewed for Addressee  
Corres. Control RFP

10-25-94 JAD  
DATE BY

Ref Ltr. #

DOE ORDER # 5400-1

EG&G  
ROCKY FLATS PLANT  
CORRESPONDENCE CONTROL



SW-A-003773

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VIII

999 18th STREET - SUITE 5000, O.E.  
DENVER, COLORADO 80202-2466 MAIL ROOM

1994 SEP 13 A 8:26

SEP -9 1994

Mr. Jon Dion  
Department of Energy  
Rocky Flats Office  
P.O. Box 928  
Golden, CO 80402-0928

RE: Final Well Evaluation Report, Rocky Flats Plant

Dear Mr. Dion:

EPA and its contractor, PRC Environmental Management, Inc. (PRC) have reviewed the Final Well Evaluation Report for the Rocky Flats Plant (RFP), dated April 29, 1994. The purpose of the document is to determine whether the existing groundwater monitoring program at RFP meets regulatory monitoring requirements and site-wide programmatic goals. The primary focus of this review was an assessment of the rationale presented by DOE for eliminating wells from the groundwater sampling program. In general, EPA found this to be a good quality document and that its intended purposes are worthwhile. EPA also agrees that collection of groundwater samples from many wells can be eliminated or reduced, however after careful analysis, it is strongly recommended that DOE modify the changes presented in its report in accordance with the attached comments.

Table 1 (attached to this review) is a modified version of the original Table 4-4 from the Final Well Evaluation Report and lists each well that DOE proposes to eliminate from the sampling program and the reason for elimination. Three columns have been added to this table to indicate whether EPA agrees or disagrees with the rationale, and the reason why. General and specific comments on the document and Table 1 are provided in Attachment 1 to this letter.

Please call me at 294-1071 if you have any questions or comments.

Sincerely,

*Gary Kleeman*  
Gary Kleeman  
Rocky Flats Section

Attachment

cc: Elizabeth Pottorff, CDH

cc w/o Attach:

Gail Hill, DOE  
Shirley Ollinger, DOE  
Joe Schieffelin, CDH

FILE 30-6  
12537



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CDPHE  
COMMENTS  
FINAL WELL EVALUATION REPORT  
U.S. DOE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

Section 2.2.1, page 2-14: Future updates of this document should include more site-specific characterization of lithologic and hydrostratigraphic unit thinning from north to south as well as from east to west, especially in light of conditions recently identified in the Walnut and Woman Creek drainages.

Section 2.2.2, page 2-20: Two of the three well pairs exhibiting upward gradients are below Rocky Flats Lake which may have significant impact on both the alluvial and bedrock hydrologic systems on the south side of Woman Creek. This information may be important to management decisions in the south buffer zone. It may also be of interest as an example of the potential effects of higher water levels elsewhere on plant site.

Section 2.3.1.3, page 2-40: Standards information for mapped analytes should be included as a breakpoint in the isopleths chosen for display. For example if a standard is lower than background, data in the range between background and the standard should be included in a separate band.

Section 2.3.2.4 page 2-56: Why is only U233/234 considered for well B205589? These values seem to increased in amount from those reported in the facility's 1990-91 data. Also, what is the ratio to of U233/234 to U238 for this well? If this well is contaminated with uranium that is greater than observed in other background areas, it may not be appropriate to maintain this well as a data point in the background statistics.

Section 3.4, page 3-49: RFP withdrew from hearing on removal of aquatic life standards from segments 4 and 5 pending completion of a "Use Attainability Study". Hearing is rescheduled for Spring 1995. Hearings on statewide radionuclide standards have been pushed back to November 1995. Hearings on site-specific radionuclide standards are now scheduled for May 1996.

Section 4.2.1.2, page 4-23: Bullet two suggests quarterly monitoring for areas where gradient reversal is suspected in several drainages. Water levels measured on a monthly basis would also be needed to characterize this problem, as well as comparisons to storm events at the site.

Section 4.2.1.2, page 4-23: In bullet three, the wells added to the area east and south of the East Trenches should also add to the top of bedrock information for this area.

Section 4.3, pages 4-24 and Figure 4-1: Two rounds of sampling for a new well is not adequate for determining ground water quality conditions. In 6 CCR 1007-3, section 265.92(c)(1), initial concentrations in monitoring wells must be determined by taking quarterly measurements for one year. Thus, the plan for using only two round of sampling would not meet the requirements under the Colorado Hazardous Waste Regulations.

Section 4.3, pages 4-26 and 4-27: The contaminants identified in Table 4-5 should be used in conjunction with newly installed wells. Four quarters of well data (preferable consecutive) should

be used to determine if additional quarters of sampling at the more comprehensive level is needed. If these contaminants are shown not to be present, then the lesser level of sampling should be implemented.

Section 4.5.1.1 Page 4-30: Bullet one- Please include excavation data such as the 881 Hillside French Drain excavation in the data to be integrated.

Section 4.5.1.2 page 4-31: Bullet five- Construction of potentiometric surface maps based on hydrostratigraphic units rather than lithostratigraphic units. Please give a more detailed description of what is intended here, including the hydrostratigraphic groupings to be used and the reference that explains how the exceptions to the assumptions of potentiometric surface mapping (isotropic medium, horizontal flow) should be handled.

Section 4.5.1.3 page 4-32: Bullets one and five - what information would be derived from concentration contour maps based on hydrostratigraphic units? Heterogeneity is an important factor in the dispersal of contaminants. Even small differences between alluvial and weathered bedrock hydraulic conductivities may preclude lumping these lithologies together as the "upper hydrostratigraphic unit", especially for detailed fate and transport modeling.

Section 4.5.2, page 4-33: Further characterization of low-yield wells may show that many of the older wells are either improperly constructed or not placed in an appropriate zone to determine ground water flow. Because of the variability noted in most of the potentiometric levels at the facility, it might be best to evaluate low flow wells before altering the SOP for ground water level measurements. Also, if wells are constructed with sumps, it would probably be appropriate to ensure that that data is maintained in such a manner that the people sampling the well are aware a sump exists.

CDPHE COMMENTS ON TABLE 4-4:

KEEP: 1987 (EPA Agrees)  
2486  
2986

TABLE 4-1

KEEP: 4186

Also keep P209189 (I could not find this well in any table.)

## ATTACHMENT 1

### REVIEW OF THE FINAL WELL EVALUATION REPORT, ROCKY FLATS PLANT

#### GENERAL COMMENTS

Comment 1: A stated goal of this report is to document the current network of monitoring wells. It is assumed that the well data sheets provided in Volume II of the appendices are intended to fulfill that purpose. The well data sheets and accompanying analytical data summaries provide a useful compendium of information on the existing well network; however, this appendix requires further editing before it should be considered final. Many of the hydrographs appear to be inverted. Wells that are supposedly dry most of the time, such as well 3186, exhibit a flat line across the top of the hydrograph with an occasional downward spike. Other hydrographs contradict data listed on the well data sheets. For instance, the data sheet for well 2386 lists a minimum depth to water of 26.1 feet. The accompanying hydrograph shows the minimum depth to water to be approximately 62 feet. About half of the data sheets list identical ground surface and top of bedrock elevations, even though the listed depth to bedrock may be anywhere from 3 to 50 feet. These errors make it difficult to use the well data sheets in any type of analysis; therefore, they should be corrected.

Comment 2: Criteria used to determine the analytes to include in each well's analytical data summary were not explicitly stated in the document. The analytical data summaries that accompany each well data sheet may include one to 80 analytes, or may be missing altogether. Generally, wells that are known to be located in contaminated areas seemed to be the wells with the longest analyte lists. However, some errors are evident. For instance, well 31791 is shown on Figure 2-78 as having a trichloroethene (TCE) concentration of between 10 and 100 micrograms per liter ( $\mu\text{g/L}$ ) in samples collected during the fourth quarter of 1992, but TCE is not listed on the analytical data summary sheet for this well. A common error noted in many of the analyte lists is the double

entry (with different statistics) of the same analyte within one list. This comment describes a major weakness in the well network documentation. Because of the lack of explicit criteria and the frequency that errors were noted, the analyte lists should be edited and the criteria clearly stated for these summaries to be useful.

Comment 3:

The text and plume maps included with this document create a false impression that contaminants are not moving in the groundwater. For example, the text states that "large-scale migration is not indicated by comparison of 1990 and 1992 data" and implies that any change in plume boundaries is a function of the increased data coverage in 1992. The TCE plume maps, however, reveal one area where an increase in either the spatial extent or concentration of TCE cannot be explained by an increase in data coverage. According to Plates 2-75 and 2-76, TCE concentrations at well 2987, located adjacent to the South Interceptor Ditch (SID) in Operable Unit (OU) 2, increased from below 5  $\mu\text{g/L}$  to more than 1,000  $\mu\text{g/L}$  from second quarter 1992 to fourth quarter 1992. This increase should be considered to represent a significant plume advance, particularly because of well 2987's location on the SID.

Furthermore, some areas of probable plume advancement are not depicted on these figures at all. Samples from well 3986, located approximately 2,000 feet northeast of the maximum extent of the OU2 TCE plume as depicted on Figure 2-76, contained a maximum TCE concentration of 77  $\mu\text{g/L}$ , according to the analytical data summary for well 3986. Data recently retrieved from the U.S. Environmental Protection Agency (EPA) Rocky Flats Data Retrieval Process (RFDRP) show a maximum TCE concentration of 418  $\mu\text{g/L}$  and a maximum carbon tetrachloride concentration of 2,292  $\mu\text{g/L}$  in samples at this well. Because the RFDRP database is more current than the analytical data in the well evaluation report, these RFDRP data show that a contamination front is moving into this area. Obviously, a document such as the final well evaluation report can present only data that were available at the time the report was written, but it should be emphasized that the plume maps show only selected "snapshots" of the data. Broad generalizations about plume

movement should not be extrapolated from the small data set represented by the four plume maps for each compound; these statements should be removed from the text.

Comment 4: The final well evaluation report exhibits confusion over the meaning of the upper hydrostratigraphic unit (UHSU) and the lower hydrostratigraphic unit (LHSU). The UHSU has been interpreted in previous documents as including all unconsolidated deposits as well as sandstones that subcrop below the unconsolidated deposits and weathered bedrock, whether it be sandstone or claystone. This definition includes all bedrock materials that are expected to have good hydraulic communication and distinguishes them from deep, isolated sandstones that should not exhibit good hydraulic communication with surficial materials in the UHSU. Section 2.2.2 discusses vertically distributed potentiometric data and uses hydrographs from well clusters to evaluate vertical hydraulic gradients. On page 2-17, the text states that "the presence of vertical hydraulic connection between hydrostratigraphic units at different depths can be qualitatively assessed by comparing the water elevation hydrographs in wells screened in those units over time". The alluvial/bedrock well pairs used for this analysis include bedrock wells that are screened anywhere from 2 feet to 100 feet below the upper bedrock surface. Bedrock wells that are screened 2 feet below the top of bedrock are obviously part of the UHSU, whereas the deep sandstones should probably be considered to be part of the LHSU. Thus, the important distinction between UHSU and LHSU is missed and the objectives, as well as results, of the analysis are vague. The objectives should be restated to indicate whether the goal is to assess hydraulic connection and gradient direction between wells in the UHSU and LHSU, or to assess these properties between alluvial and bedrock wells within the UHSU. The well pairs used in the analysis should be selected on the basis of the chosen objective.

Comment 5: Section 4.0 recommends eliminating wells that are usually dry, redundant or poorly constructed (such as wells screened across two geologic units and wells with screened intervals that are too large) from the groundwater monitoring network. The recommendations for groundwater monitoring should clarify,

(1) whether the wells proposed for elimination from the sampling network are to be abandoned, and (2) whether replacement wells will be drilled for the wells that are eliminated from the sampling network because of poor construction. Several of the wells screened across two units are in strategic locations that should continue to be sampled, such as downgradient of the OU1 french drain (wells 31491, 31791, and 31891) and areas where very high concentrations of contaminants have been shown to exist (well 07391, located downgradient of Trench T-2, which had a maximum TCE concentration of 150,000  $\mu\text{g/L}$ ).

### SPECIFIC COMMENTS

Comment 1: Section 2.3.2.6, Page 2-58, Paragraph 1. The text states that dense nonaqueous phase liquid (DNAPL) concentrations exceeded 10 percent of the solubility limit in groundwater samples from four wells, and exceeded 1 percent of the solubility limit in groundwater samples from an additional 19 wells, as shown in Table 4-2. The text then lists only eight wells (in addition to the four wells with DNAPL concentrations greater than 10 percent of solubility) that may be affected by DNAPL because DNAPL concentrations exceed 1 percent of the solubility limit. Table 2-4 actually lists a total of 15 different wells (four greater than 10 percent, and 11 greater than 1 percent); apparently some wells were double-counted in the text if samples contained more than one analyte that exceeded the 1 or 10 percent levels. No reason is provided in the text for not considering three wells (3586, 02291, and P220089) listed on Table 2-4 to be potentially affected by DNAPL. The text also states that all of these wells are either in OU1 or OU2, except for one each in OU4 and OU7. Well 0390, however, is not within the boundaries of any OU; it is more than 4,000 feet southwest (upgradient) of the Present Landfill. These inaccuracies in Section 2.3.2.6 should be corrected.

Comment 2: Section 4.1.2, Page 4-2, Paragraph 2. The text states that two of the reasons that wells were eliminated from the monthly water level monitoring network are: (1) they "were considered dry according to Standard Operating Procedures (SOP) GW.01 - Water Level Measurements in Wells and



Piezometers (EG&G 1992)," and (2) they "were slow to recover after sampling (making a subsequent measurement unusable)." The above referenced SOP was reviewed and was not found to contain any criteria that could be used to classify a well as being dry. However, the SOP states that water levels should be measured before purging a well and collecting a sample. These two reasons for eliminating wells from the monthly monitoring network should be withdrawn because they are not supported by the referenced SOP. ~~Wells that were eliminated from the monthly monitoring network for either of these reasons should be reevaluated.~~

Comment 3:

Table 4-4. The rationale used most frequently to justify eliminating a well from the sampling network in Table 4-4 is that it is "chronically dry." The well data sheets for the corresponding wells show that many of the wells labelled chronically dry, were only dry 10 percent to 50 percent of the time. These wells should contain sufficient water during the high-water period (second quarter) and therefore should be kept on semiannual monitoring and sampled when there is sufficient water in them.

REFERENCE

EG&G, 1992. EMD Operating Procedures, Manual No. 5-21000-OPS-GW, Volume II: Groundwater. Rocky Flats Plant. March 1.

TABLE 1

**WELLS RECOMMENDED FOR ELIMINATION FROM SAMPLING PROGRAM<sup>1</sup>**  
**(TABLE 4-4 (MODIFIED) OF THE WELL EVALUATION REPORT)**

Well ID	Reason for Elimination	Agree	Disagree	Location	Comments
1886	Chronically dry	X		OU4	
2486	Chronically dry	X		OU4	
2986	Chronically dry	X		OU4	
3186	Chronically dry	X		OU4	
5486	Adequate coverage provided by nearby wells		X	Buffer - West	All wells in area proposed for elimination
5586	Adequate coverage provided by nearby wells		X	Buffer - West	All wells in area proposed for elimination
5786	Adequate coverage provided by nearby wells		X	OU5	OU5 RI <sup>2</sup> has not been completed
5886	Adequate coverage provided by nearby wells		X	OU5	OU5 RI has not been completed
6786	Chronically dry		X	Buffer - East	Dry 11 percent of the time
0587	Adequate coverage provided by nearby wells	X		OU7	
1087	Chronically dry		X	OU2	Dry 19 percent of the time
1287	produces little water/adequate coverage provided by nearby wells	X		OU2	
1987	Chronically dry		X	OU2	Dry 38 percent of the time
2087	Produces little water/adequate coverage provided by nearby wells		X	OU2	Dry 0 percent of the time; only well in mound area screened in LHSU <sup>3</sup>

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TABLE 1 (Continued)

**WELLS RECOMMENDED FOR ELIMINATION FROM SAMPLING PROGRAM<sup>1</sup>**  
**(TABLE 4-4 (MODIFIED) OF THE WELL EVALUATION REPORT)**

Well ID	Reason for Elimination	Agree	Disagree	Location	Comments
B200689	Background geochemical characterization well - program completed	X		Buffer - North	
B 200789	Background geochemical characterization well - program completed	X		Buffer - North	
B 201089	Background geochemical characterization well - program completed	X		Buffer - North	
B 201289	Background geochemical characterization well - program completed	X		Buffer - North	
B 201589	Background geochemical characterization well - program completed	X		Buffer - North	
B 203289	Background geochemical characterization well - program completed	X		Buffer - North	
B 203489	Background geochemical characterization well - program completed	X		Buffer - North	
B 203789	Background geochemical characterization well - program completed	X		Buffer - North	
B 103989	Background geochemical characterization well - program completed	X		Buffer - North	
B 204189	Background geochemical characterization well - program completed	X		Buffer - North	
B 207289	Chronically dry	X		OU4	

TABLE 1 (Continued)

**WELLS RECOMMENDED FOR ELIMINATION FROM SAMPLING PROGRAM<sup>1</sup>**  
**(TABLE 4-4 (MODIFIED) OF THE WELL EVALUATION REPORT)**

Well ID	Reason for Elimination	Agree	Disagree	Location	Comments
B 208389	Chronically dry	X		OU4	
B 208489	Chronically dry	X		OU4	
B 218789	Adequate coverage provided by nearby wells	X		OU2	
B 302989	Background geochemical characterization well - program completed	X		Buffer - South	
B 304789	Background geochemical characterization well - program completed	X		Buffer - South	
B 317189	Chronically dry	X		Buffer - East	
B 320089 a/k/a P320089	Adequate coverage provided by nearby wells		X	Plant	Analyte/well info not provided; Contaminants detected/need for IA
B 400289	Background geochemical characterization well - program completed	X		Buffer - West	
B 400389	Background geochemical characterization well - program completed	X		Buffer - West	
B 401989	Background geochemical characterization well - program completed	X		Buffer - West	
B 405189	Background geochemical characterization well - program completed	X		Buffer - South	
B 405289	Background geochemical characterization well - program completed	X		Buffer - South	

TABLE 1 (Continued)

**WELLS RECOMMENDED FOR ELIMINATION FROM SAMPLING PROGRAM<sup>1</sup>**  
**(TABLE 4-4 (MODIFIED) OF THE WELL EVALUATION REPORT)**

Well ID	Reason for Elimination	Agree	Disagree	Location	Comments
B 405489	Background geochemical characterization well - program completed	X		Buffer - West	
B 405689	Background geochemical characterization well - program completed	X		Buffer - West	
B 405789	Background geochemical characterization well - program completed	X		Buffer - West	
00590	Adequate coverage provided by nearby wells		X	Buffer - West	All wells in area proposed for elimination
00690	Adequate coverage provided by nearby wells		X	Buffer - West	All wells in area proposed for elimination
00790	Adequate coverage provided by nearby wells		X	Buffer - West	All wells in area proposed for elimination
00990	Adequate coverage provided by nearby wells		X	Buffer - West	All wells in area proposed for elimination
00691	Chronically dry		X	OU2	Dry 22 percent of the time
00791	Chronically dry	X		OU2	
00891	Chronically dry		X	OU2	Dry 17 percent of the time
00991	Chronically dry	X		OU2	
01991	Adequate coverage provided by nearby wells		X	OU2	Only well screened directly above bedrock contact, after B218789 is eliminated

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TABLE 1 (Continued)

WELLS RECOMMENDED FOR ELIMINATION FROM SAMPLING PROGRAM<sup>1</sup>  
(TABLE 4-4 (MODIFIED) OF THE WELL EVALUATION REPORT)

Well ID	Reason for Elimination	Agree	Disagree	Location	Comments
02791	Chronically dry	X		OU2	
02891	Chronically dry		X	OU2	Dry 38 percent of the time
02991	Adequate coverage provided by nearby wells	X		OU2	
03191	Chronically dry		X	OU2	Dry 13 percent of the time
03891	Chronically dry	X		OU2	
04891	Chronically dry		X	OU2	Dry 15 percent of the time
05691	Adequate coverage provided by nearby wells		X	OU2	Well 05691 in a deeper part of the paleochannel than well 03591, and should be retained
06291	Produces little water/adequate coverage provided by nearby wells	X		OU2	
06691	Adequate coverage provided by nearby wells	X		OU2	
06891	Adequate coverage provided by nearby wells	X		OU2	
06991	Adequate coverage provided by nearby wells	X		OU2	
07191	Adequate coverage provided by nearby wells	X		OU2	
07291	Produces little water/adequate coverage provided by nearby wells	X		OU2	

TABLE 1 (Continued)

**WELLS RECOMMENDED FOR ELIMINATION FROM SAMPLING PROGRAM<sup>1</sup>**  
**(TABLE 4-4 (MODIFIED) OF THE WELL EVALUATION REPORT)**

Well ID	Reason for Elimination	Agree	Disagree	Location	Comments
07391	Well screened across two geological units		X	OU2	High VOC concentrations (150 ppm <sup>5</sup> of TCE, 1 ppm of vinyl chloride); alternatively, install alluvial/bedrock well pair
08091	Chronically dry		X	OU2	Dry 15 percent of the time
08291	Adequate coverage provided by nearby wells	X		OU2	
08491	Adequate coverage provided by nearby wells	X		OU2	
08591	Chronically dry		X	OU2	Dry 15 percent of the time
11291	Chronically dry	X		OU2	
11491	Chronically dry		X	OU2	Dry 36 percent of the time
12291	Adequate coverage provided by nearby wells	X		OU2	
12491	Adequate coverage provided by nearby wells		X	OU2	Needed to monitor bedrock VOC plume
12691	Adequate coverage provided by nearby wells		X	OU2	Needed to monitor bedrock VOC plume
12891	Adequate coverage provided by nearby wells		X	OU2	Need data at Trench T-5
13091	Adequate coverage provided by nearby wells	X		OU2	
13591	Chronically dry	X		OU2	
31491	Well screened across two geological units		X	OU1	Downgradient of French Drain



TABLE 1 (Continued)

WELLS RECOMMENDED FOR ELIMINATION FROM SAMPLING PROGRAM<sup>1</sup>  
(TABLE 4-4 (MODIFIED) OF THE WELL EVALUATION REPORT)

Well ID	Reason for Elimination	Agree	Disagree	Location	Comments
31791	Well screened across two geological units		X	OU1	Continue monitoring because of TCE detection in 4th Quarter 1992
31891	Well screened across two geological units		X	OU1	Only 0.6 feet of screen sticks up into clayey colluvium
32591	Adequate coverage provided by nearby wells		X	OU1	Located in organic plume (IHSS <sup>6</sup> 119.1) that is not fully characterized
33491	Chronically dry		X	OU1	Dry 28 percent of the time
33691	Adequate coverage provided by nearby wells	X		OU1	
33891	Produces little water/adequate coverage provided by nearby wells		X	OU1	Located in 119.1 organic plume; indicating plume spreading west
34591	Adequate coverage provided by nearby wells	X		OU1	
35391	Chronically dry		X	OU1	Dry 13 percent of the time
35991	Adequate coverage provided by nearby wells	X		OU1	
36391	Adequate coverage provided by nearby wells	X		OU1	
36691	Produces little water/adequate coverage provided by nearby wells		X	OU1	Keep either 36691 or 37191 to monitor IHSS 130
36991	Chronically dry	X		OU1	
37191	Adequate coverage provided by nearby wells		X	OU1	Keep either 36691 or 37191 to monitor IHSS 130

TABLE 1 (Continued)

**WELLS RECOMMENDED FOR ELIMINATION FROM SAMPLING PROGRAM<sup>1</sup>**  
**(TABLE 4-4 (MODIFIED) OF THE WELL EVALUATION REPORT)**

Well ID	Reason for Elimination	Agree	Disagree	Location	Comments
38191	Adequate coverage provided by nearby wells	X		OU1	
38291	Adequate coverage provided by nearby wells	X		OU1	
38891	Adequate coverage provided by nearby wells		X	OU1	Downgradient of French Drain & nearby well dry or bedrock
39191	Adequate coverage provided by nearby wells	X		OU1	
45091	Wind Energy site	X		Buffer - West	
45191	Wind Energy site	X		Buffer - West	
45291	Wind Energy site	X		Buffer - West	
03092	Chronically dry	X		Buffer - North	
03192	Chronically dry	X		Buffer - North	
10092	Chronically dry		X	OU1	Dry 45 percent of the time
10192	Chronically dry	X		OU1	Continue to check water level
10392	Chronically dry	X		OU1	Continue to check water level
10892	Chronically dry	X		OU1	Continue to check water level
43492	Well screened across two geologic units	X		Buffer - South	

<sup>1</sup> Selected from wells listed as active as of June 1993.

<sup>2</sup> Remedial investigation

<sup>3</sup> Lower hydrostratigraphic unit

<sup>4</sup> Volatile organic compound

<sup>5</sup> Parts per million

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TABLE 1 (Continued)

WELLS RECOMMENDED FOR ELIMINATION FROM SAMPLING PROGRAM<sup>1</sup>  
(TABLE 4-4 (MODIFIED) OF THE WELL EVALUATION REPORT)

:CD: September 9, 1994, wulf&kleeman, grk, A:\WELLEVAL.TBL